

3. The cooling system for internal combustion engine of claim 2 wherein:
said tube in tube heat exchanger is a counter flow heat exchanger.
4. The cooling system for internal combustion engine of claim 3 wherein:
said tube in tube heat exchanger is comprised of aluminum.
5. The cooling system for internal combustion engine of claim 1 further comprising:
a high side line connected to said compressor, said high side line
connected to said electronic expansion valve, said high side line capable of fluid
communication of conventional refrigerant.
6. The cooling system for internal combustion engine of claim 4 wherein:
said high side line is comprised of aluminum.
7. The cooling system for internal combustion engine of claim 1 further comprising:
a first low side line connected to said electronic expansion valve, said first
low side line connected to said evaporator, said first low side line capable of fluid
communication of conventional refrigerant.
8. The cooling system for internal combustion engine of claim 1 further comprising:
a second low side line connected to said evaporator, said second low side
line connected to said compressor, said second low side line capable of fluid
communication of conventional refrigerant.

conventional internal combustion system cooling system, said heat exchanger is a tube in tube heat exchanger.

12. The cooling system for internal combustion engine of claim 11 wherein:

said tube in tube heat exchanger is a counter flow heat exchanger.

13. The cooling system for internal combustion engine of claim 12 wherein:

said tube in tube heat exchanger is comprised of aluminum.

14. The cooling system for internal combustion engine of claim 13 further comprising:

a high side line connected to said compressor, said high side line connected to said electronic expansion valve, said high side line capable of fluid communication of conventional refrigerant.

15. The cooling system for internal combustion engine of claim 14 wherein:

said high side line is comprised of aluminum.

16. The cooling system for internal combustion engine of claim 15 further comprising:

a first low side line connected to said electronic expansion valve, said first low side line connected to said evaporator, said first low side line capable of fluid communication of conventional refrigerant.

an electronic expansion valve connected to said evaporator, said electronic expansion valve in fluid communication with said evaporator, said electronic expansion valve capable of metering said conventional refrigerant;

5 a heat exchanger having a refrigerant communication chamber and an antifreeze communication chamber, said heat exchanger refrigerant communication chamber connected to said evaporator, said heat exchanger refrigerant communication chamber in fluid communication with said evaporator, said heat exchanger antifreeze communication chamber connectable to a conventional internal combustion system cooling system, said heat exchanger is a
10 tube in tube heat exchanger, said tube in tube heat exchanger is a counter flow heat exchanger, said tube in tube heat exchanger is comprised of aluminum, said heat exchanger has substantially the same shape as a conventional internal combustion engine radiator;

15 a high side line connected to said compressor, said high side line connected to said electronic expansion valve, said high side line capable of fluid communication of conventional refrigerant, said high side line is comprised of aluminum;

20 a first low side line connected to said electronic expansion valve, said first low side line connected to said evaporator, said first low side line capable of fluid communication of conventional refrigerant; and

a second low side line connected to said evaporator, said second low side line connected to said compressor, said second low side line capable of fluid communication of conventional refrigerant.